

INTERNATIONAL SEARCH REPORT

International application No.
PCT/CA2004/001698

A. CLASSIFICATION OF SUBJECT MATTER

According to International Patent Classification (IPC) or to both national classification and IPC
IPC 7: A61K 38/27; A61K 47/30; A61P 5/06

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
IPC 7: A61K 38/27; A61K 47/30; A61P 5/06

Electronic data base consulted during the international search (name of data base, and, where practicable, search terms used)
Canadian Patent Database; Delphion; Genbank; keywords: growth hormone; somatotropin; ethylene; glycol; PEG; polyethylene glycol; polyol; sugar; stability; storage; aqueous; formulation

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US6011011 PHARMACIA & UPJOHN COMPANY, Hageman MJ, 4 January 2000 Whole document	1, 2, 4-6 and 8-12
Y	CA2378949 GRANDIS BIOTECH GMBH, Siebold B. et al, 18 January 2001 Whole document	1, 2, 4-6 and 8-12
Y	KATAKAM M, et al. "Use of Poloxamer Polymers to Stabilize Recombinant Human Growth Hormone Against various Processing Stresses", PHARMACEUTICAL DEVELOPMENT AND TECHNOLOGY, May 1997 vol. 2(2), pages 143-149; Whole document	1, 2, 4-6 and 8-12

Further documents are listed in the continuation of Box C.

Patent family members are listed in annex.

* Special categories of cited documents :	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier application or patent but published on or after the international filing date	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&" document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international-type search
07 January 2005 (07-01-2005)

Date of mailing of the international-type search report
24 February 2005 (24-02-2005)

Name and mailing address of the ISA/CA
Commissioner of Patents
Canadian Patent Office - PCT
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Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons :

1. ☒ Claims Nos. :
because they relate to subject matter not required to be searched by this Authority; namely:

Remarks: Because of the inclusion of an injection step in claims 13-14 these claims are considered to be directed towards methods of medical treatment of a human or animal patient which the authority is not required to search under Rule 39.1(iv) of the PCT. The search has therefore been established based on the use of the formulations .
2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically :
3. ☐ Claims Nos. :
because they are dependant claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observation where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows :

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos. :
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos. :

Remark on Protest ☐ The additional search fees were accompanied by the applicant's protest.
☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.
PCT/CA2004/001698

Patent Document Cited in Search Report	Publication Date	Patent Family Member(s)	Publication Date
US6011011	04-01-2000	AT156361T T	15-08-1997
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		HU0202189 A2	28-10-2002
		IL147253D D0	14-08-2002
		JP2003504346T T	04-02-2003
		NO20020151 A	12-03-2002
		NZ516507 A	27-02-2004
		PL353238 A1	03-11-2003
		SK252002 A3	04-06-2002
		TR200200034T T2	21-05-2002
		WO0103741 A1	18-01-2001
		ZA200200176 A	09-06-2003